



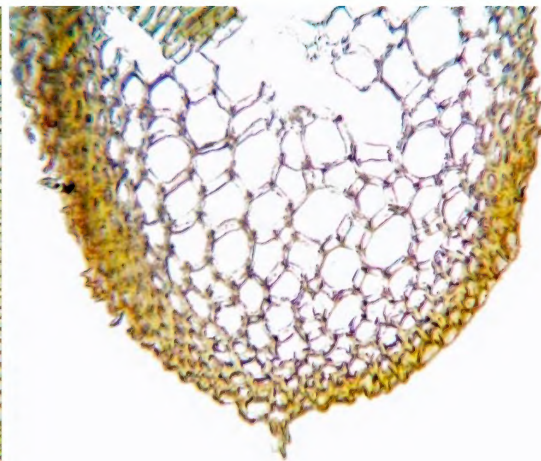
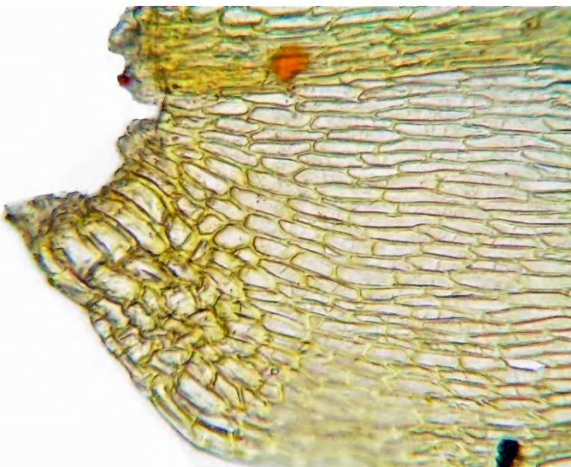
Fasciculus Muscorum II : New Species Reports and Miscellaneous Notes on the Bryoflora of New Mexico¹

Kelly W. Allred,² Russ Kleinman,³ & Karen S. Blisard⁴

We continue here the series devoted to studies of the New Mexico bryoflora (see Allred et al. 2022). In this issue, four species are reported for New Mexico for the first time, a significant range extension is reported for a rare liverwort, and an interesting awnless form of *Syntrichia ruralis* is documented.

Additions to the New Mexico Bryoflora

Drepanocladus polygamus (Schimper) Hedenäs: Rio Arriba County: Vicinity of Brazos Canyon, on ground in swamp, 1 Sep 1914, with H.C. Bollman, *P.C. Standley 11034* (MIN) (det. A.J. Grout). ●Photos by Kelly Allred.



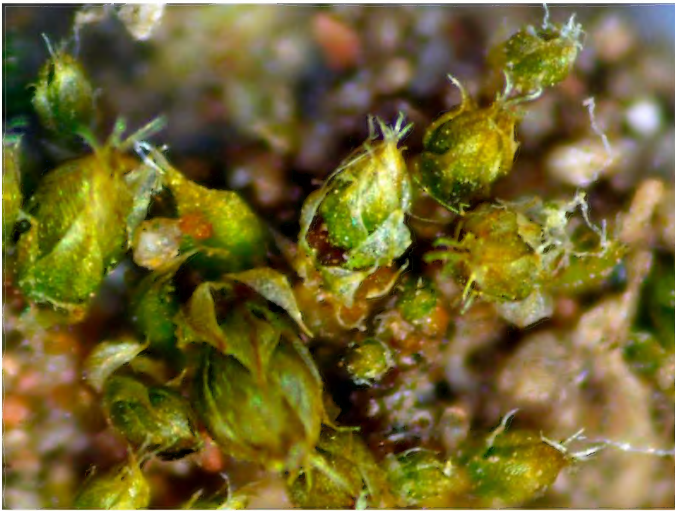
¹ Allred, K.W., R. Kleinman, & K.S. Blisard. 2020. Fasciculus Muscorum II : New Species Reports and Miscellaneous Notes on the Bryoflora of New Mexico. The New Mexico Botanist 74: 1-8. <https://floraneomexicana.org/the-new-mexico-botanist-newsletter/>

² Professor Emeritus, New Mexico State University Herbarium (NMC/NMCR), Las Cruces; kla49@outlook.com

³ Dale Zimmerman Herbarium (SNM), Department of Natural Sciences, Western New Mexico University, Silver City; sparks@zianet.com

⁴ Silver City, New Mexico; kblisard@hotmail.com

Gemmabryum gemmilucens (R. Wilczek & Demaret) J.R. Spence (Bryaceae): Luna County: Tres Hermanas Mountains, small saddle about 1 mile west of North Peak and 1900 ft north of Manning Canyon, N31.91352° W107.75026°, 4660 ft, Chihuahuan Desert Scrub vegetation with *Fouquieria splendens*, *Opuntia orbiculata*, *Opuntia engelmannii*, *Prosopis glandulosa*, *Aristida adscensionis*, and scattered *Juniperus monosperma*, on thin soil at base of north-facing rhyolitic boulder in partial shade, 15 March 2022, *Russ Kleinman 2022-3-15-3* (NMC, SNM); same locality, 26 February 2016, *Kelly W. Allred 10751A* (NMC). ●Photos by 1-Kelly Allred (*Allred 10751A*); 2-Russ Kleinman (*Kleinman 2022-3-15-3*). ♦Our plants have consistently longer awns than those in California, the only other locality for this species in North America (also known from Europe) (Spence 2014).



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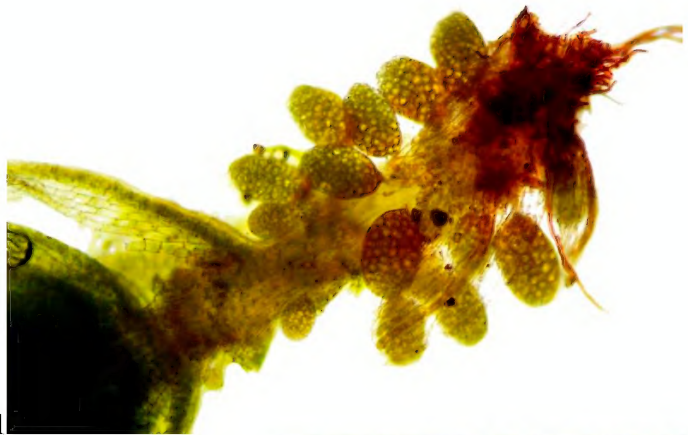


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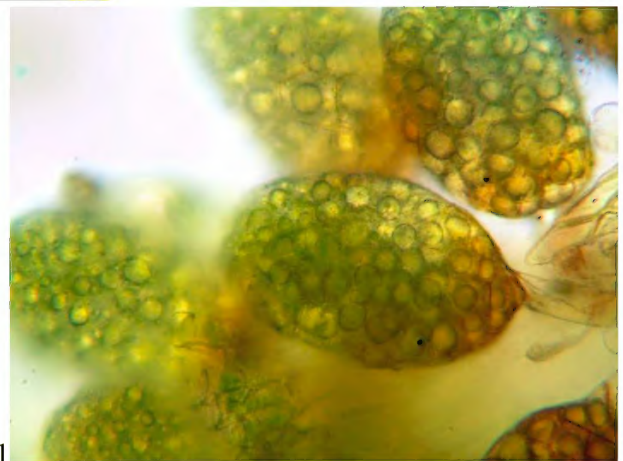


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100 µm



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Sciuro-hypnum reflexum (Starke) Ignatov & Huttunen (Brachytheciaceae): Cibola County: El Malpais National Monument, Classic Cave Skylight, about 2 air miles south of Lost Woman Crater, ponderosa, pinyon, juniper, *Ribes*, N32.92764° W108.08099°, 7513 ft, on rocks beneath the skylight, in partial shade, 16 April 2018, with Laura Baumann, Russ Kleinman, *Kelly W. Allred 10942* (NMC) (det. K.W. Allred 2022). Otero County: Sacramento Mts, Lincoln Nat. Forest, mixed conifer forest with heavy moss understory, along Hay Canyon Road, about 5.3 air miles southwest of junction with hwy 130, N32°48.1353' W105°39.7602', 8275 ft, growing on rotting log, 18 June 2003, with Lynda Allred, *Kelly W. Allred 8758* (NMC) (det. Yelena Kosovich-Anderson 2022). San Miguel County: Santa Fe National Forest, about 1.2 miles west of Cowles on Forest Road 121, Winsor Creek trailhead, subalpine mixed conifer forest, on rotting stump, N35°49.0' W105°40.8', 8535 ft (2600 m), 28 June 2000, *Kelly W. Allred 7794* (NMC). ●Photos by Kelly Allred (1-*Allred 7794*; 2-*Allred 10942*; 3-*Allred 8758*)



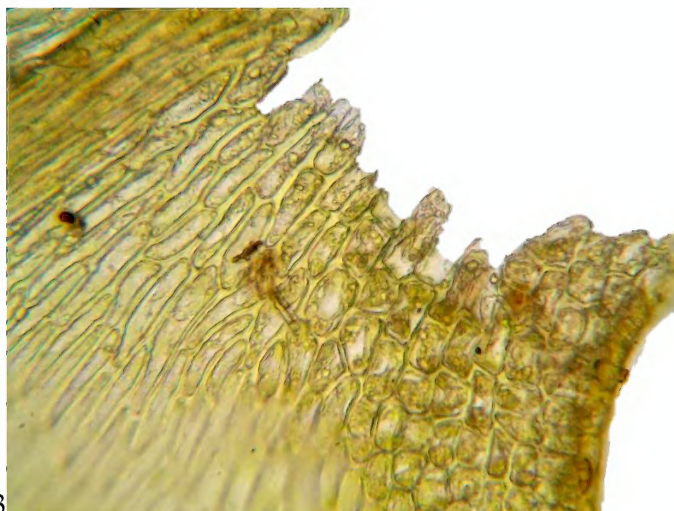
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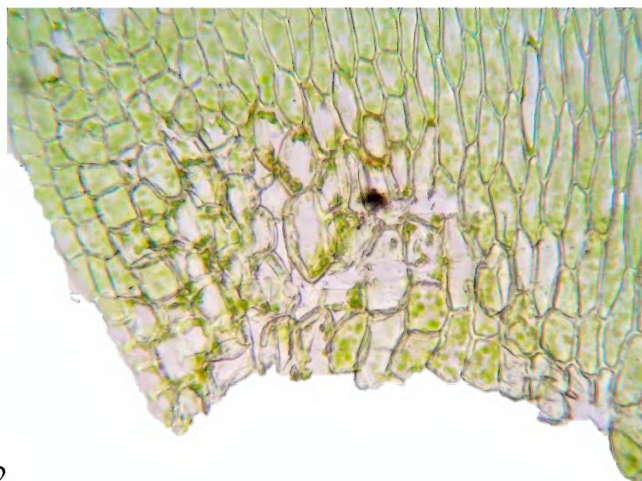
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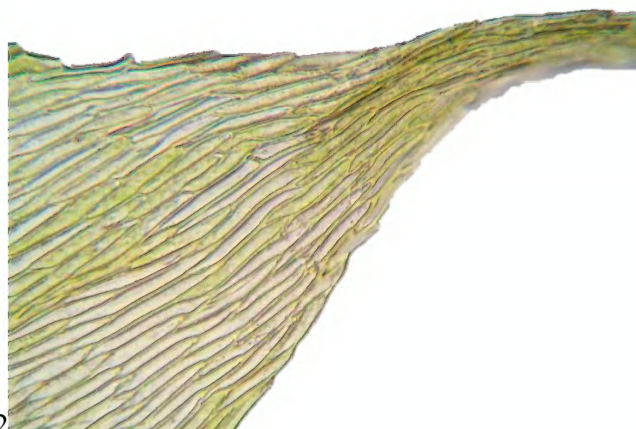
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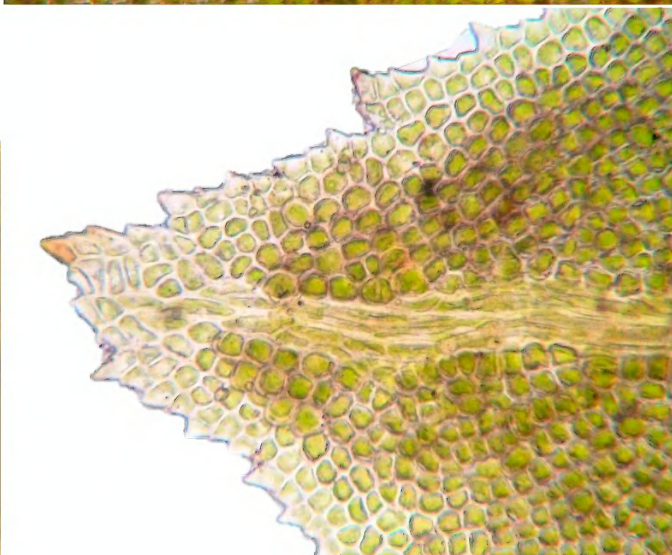
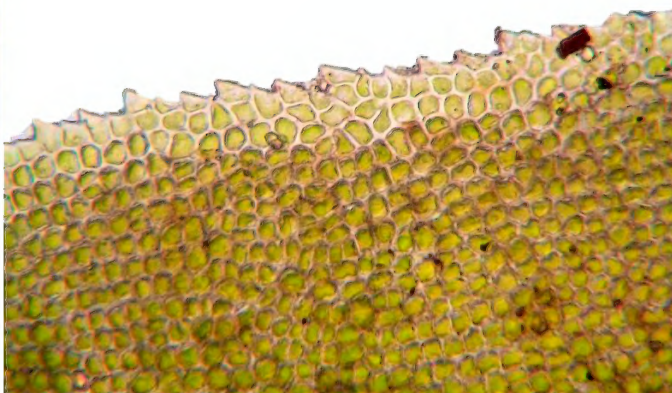
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Fissidens dubius P. Beauvois (Fissidentaceae): Eddy County: Guadalupe Mts, near end of and north side of Forest Road 540 in uppermost end of Middle Fork Big Canyon, N32°2.379' W104°47.310', limestone substrate, mixed conifer-oak woodland with Douglas fir, in splash zone on shaded underside of boulder, 5 Sep 2010, *R.D. Worthington 36357* (COLO, NMCR). •Photos by Kelly Allred, from *Worthington 36357*.



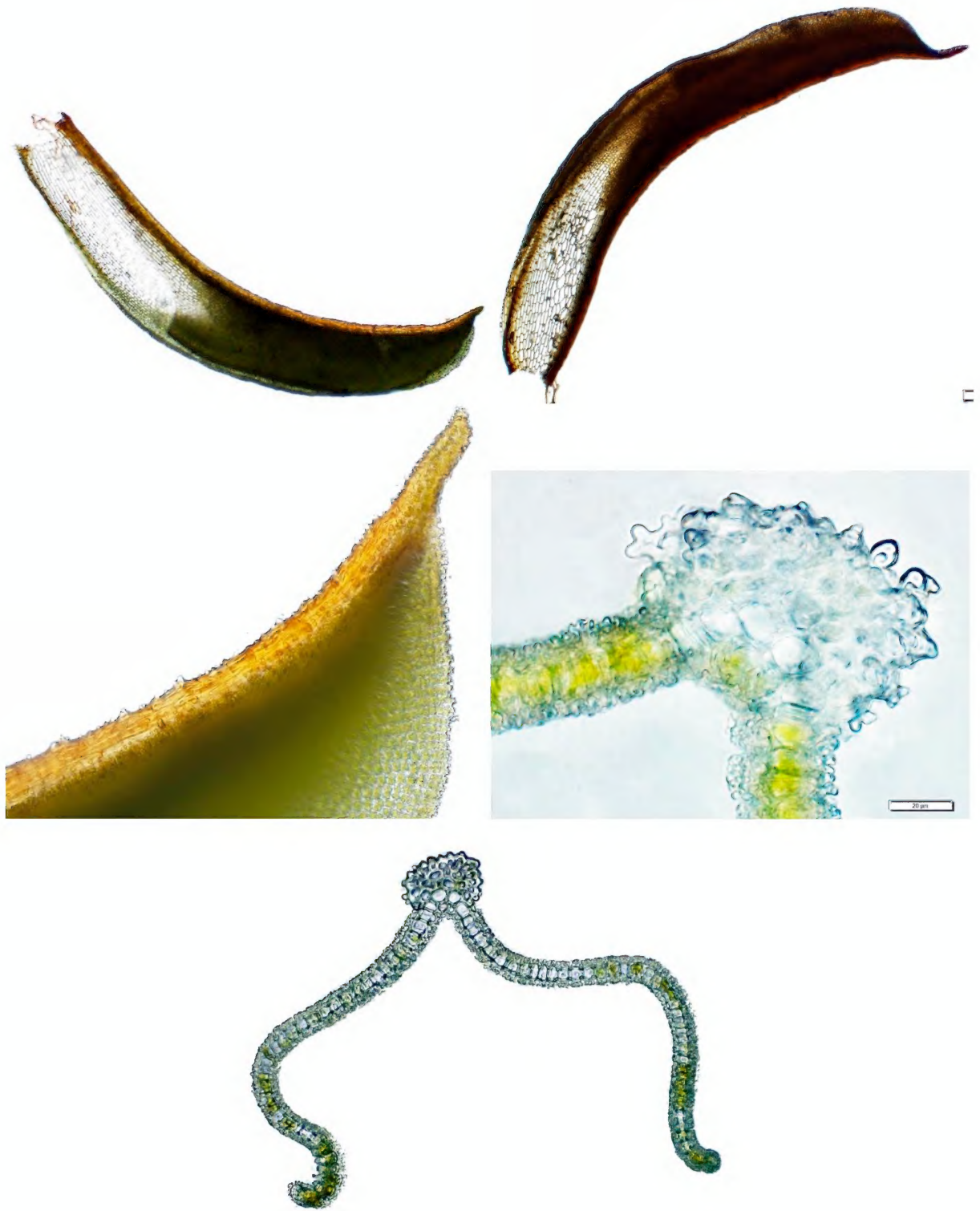


Other Significant New Mexico Bryophyte Collections

Riccia albolimbata S.W. Arnell (Ricciaceae): Lea County: Off Hwy 59 on Mescalero Ridge, on dirt road (Gemini Lane) just west of highway, N32.716354° W103.557093°, 3933 ft, with Karen Blisard, Kelly Allred, 9 Feb 2022, *Russ Kleinman* 2022-2-9-3C (SNM). ♦Previously known in the United States only from two collections in montane coniferous forest of Lincoln County, New Mexico, by Richard Worthington (33149, 34182). This new collection is a disjunction of approximately 125 miles to the southeast in an entirely different habitat on the arid plains of the Llano Estacado. We surmise that further searches will turn up additional collections of this diminutive, rare liverwort.

An Awnless *Syntrichia ruralis* (Hedwig) Weber & Mohr (Pottiaceae): On November 15, 2022, a specimen was collected by RK from piñon-juniper woodland on the south side of Bear Mountain, near Silver City. This specimen looked like *Syntrichia ruralis*, except it was missing the long hyaline hairpoint. On microscopic examination, the leaves have a nubbin of a short chlorophyllose and papillose awn. KA found a report of a similar moss from mainland Europe and the United Kingdom, aptly named *Syntrichia ruralis* var. *epilosa* (Venturi) J.J. Amman. Brent Mishler also looked at the photos, informing us that John Brinda (MO) is working on the North American varieties of *Syntrichia ruralis*. Mishler suggested simply calling this *Syntrichia ruralis* without infraspecific designation until more is known about this complex of *Syntrichia* species. ●Photos by Russ Kleinman, from Grant County, south side of Bear Mountain, junction of Bear Mountain Road and Forest Road 858, 15 Nov 2022 (SNM).





Acknowledgements

We thank the curators and staff of herbaria who make their collections available online (CNABH portal 2022). We thank MIN for the loan of *Drepanocladus polygamus* for verification. Yelena Kosovich-Anderson (RM) kindly helped verify the initial discovery of *Sciuro-hypnum reflexum* in our collections. Brent Mishler helped with verifying the awnless *Syntrichia*. Continued thanks to Zachary Rogers of NMC/NMCR for making available their collections at numerous times and hours, and for procuring loans from other herbaria for us.

Literature Cited

- Allred, K.W., R. Kleinman, & J.C. Brinda. 2022. Fasciculus Muscorum I: Nine Mosses New to New Mexico. The New Mexico Botanist 72: 1-8.
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- Spence, J.R. 2014. *Gemmabryum gemmilucens* (R. Wilczek & Demaret) J.R. Spence, p. 135. IN: Flora of North America, vol. 28. Oxford Univ. Press.